TRIBUTARY

WATER EDUCATION AND CONSERVATION NEWSLETTER SPRING 2005

"Smart Timer" Study Completed

By Eric Klotz, Section Chief, DWRe

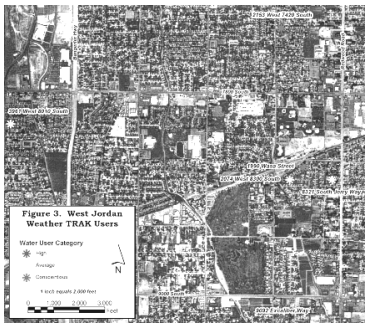
Introduction

There is a great potential for water savings right in our own backyards. Utahns' home landscapes, especially turf areas, are often over-watered. A residential survey study conducted recently by the Division of Water Resources (DWRe) found that residents of Salt Lake City with automatic sprinkler systems typically water 44 percent more than what the lawn actually needs. It is not uncommon for a homeowner to leave his automatic sprinkler timer on the same watering schedule throughout the year, even though landscape needs vary considerably throughout the season. Because the misuse of automated sprinkler timers tends to create the biggest outdoor water waste, this is a logical place to target a conservation program.

The Utah Division of Water Resources has the overall responsibility of completing studies, investigations, and plans to assist in the conservation of water resources in the state. As part of this effort, special studies are conducted to learn more about water-use trends in the state, as well as how new technology may affect this use. The purpose of this study was to compare water use of various residential and institutional customers before and after using a new evapotranspiration (ET)-based sprinkler controller. Evapotranspiration is the amount of water both used by the plant material and evaporated from the surrounding environment. ET is measured with weather stations located throughout the state.

Method

The WeatherTRAK^{tm} Automatic Timer Study targeted irrigation systems with existing automatic controllers. Existing timers were replaced with WeatherTRAK^{tm} timers (sometimes referred to as "smart" timers), and results were documented. This report encompasses the irrigation seasons of the study (2001, 2002 & 2003). The participants' water use after the installation is compared with water use before the installation. The study targeted three different types of water user: 1) high water use, 2) typical water use, and 3) water conscious use. After the 2003 irrigation season, the participants' were allowed to keep the timers.



The following question was proposed for the study: "What level of water savings can the timers achieve from (1) high water users, (2) typical users, and (3) water-conscience users?"

Conclusions

One of the biggest problems in this study has been perception. It is the perception that anything wrong with the irrigation system itself is (wrongly) a problem with the timer. When ET divided by a desirable efficiency (70 percent) is applied to the lawn, the inefficiencies of a poor sprinkler have a dramatic effect on the appearance that lawn. Since the timer is new, and the brown spots of lawn are new, the two are erroneously equated. Much DWRe staff time was spent addressing concerns that were related to sprinkler system problems and not the timers.

As the study showed, the "smart timers" are best used on high water users with efficient irrigation systems. It is impossible to apply a reasonable amount of water to a lawn if the sprinkling system has a poor efficiency. Improving efficiencies of sprinkler systems and educating people on the proper amount to irrigate will greatly reduce outdoor water waste in Utah.

So far, the timer has been effective in taking the high water users in our study from watering 233 percent

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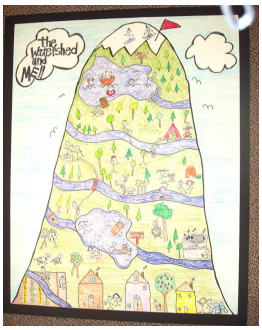
of budget to 151 percent of budget, for an average savings of 82 percent. A survey of participants after the 2002 irrigation season shows that 70 percent of participants felt the timer was easy to operate and worked better than their old timer. However, only 40 percent felt like their landscape improved in appearance and about half said they would continue to pay the annual fee associated with this specific product to keep the timer operating automatically when the study ended.

If you have questions about this study, please contact Eric Klotz at (801) 538-7264 or ericklotz@utah.gov.

Water Education Poster Contest Winners

By Rick Webster, Water Education Coordinator, DWRe



The Division of Water Resources recently held its Young Artist's Water Education Poster Contest. A banquet was held to honor the winners of the contest at the Living Planet Aquarium's Gail Benjamin Aquarium Experience. The participants were 4th grade students from around the state. They were:

Bear River Basin

Sarah Huber, Garland Elementary

Weber River Basin

Dylan Williams, Freedom Elementary

Lower Jordan River Basin

Tia Lloyd, Midvalley Elementary

Uinta Basin

Rhondelle McRae, Roosevelt Middle School

Sevier River Basin

Colin Lyman, Salina Elementary

West Colorado River Basin and GRAND PRIZE WINNER

Lauren Clarke, Castle Dale Elementary

Upper Jordan River Basin

Gibson Sibley, Wasatch Elementary

Southeast Colorado River Basin

Erin Hurst, Blanding Elementary

Kanab Creek / Virgin River Basin

LeAnn LaKay Dorney, Coral Cliffs Elementary

Cedar / Beaver

Shaylee Kae Neil, Fiddlers Canyon Elementary

West Desert Basin

Jacob Harter, Dugway Elementary

Each winner received a trophy, $150 saving bond, and a year family pass to the Aquarium. The grand prizewinner received a week stay on a houseboat on Lake Powell, provided by Aramark.

This year's theme was "The Watershed and Me".

Calendar of Events

Please visit our Events Calendar located at www.conservewater.utah.gov/calendar.

April 12 – Sep 13

Large Water User Workshops

Maintaining a large landscape area during the heat of the summer can be a challenge. It is the goal of these workshops to aid property managers and maintenance staff of large institutions, government agencies, commercial businesses and Homeowners Associations in troubleshooting maintenance and inefficiencies in their irrigation systems. Each workshop will cover topics vital to maintaining large landscapes. Please call one (1) week in advance to register. (435) 797-2255.

Date	Location	Date	Location
April 12	Orem	May 24	West Jordan
April 15	St. George	June 7	SLC
April 19	SLC	June 14	Orem
April 26	Layton	June 21	Layton
May 10	Logan	Sept 13	West Jordan
May 17	Orem		

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